

## SECTION 7. ANALYSIS OF NEEDS

To achieve its overall statement of open space and recreational goals in Section 6, the Town must understand the gaps and needs in the community. This analysis of needs takes into consideration several sources:

- Needs and values expressed by residents during the public engagement process, which included two public workshops, a community survey, and the 2020 Envision Arlington Annual Survey (see summaries in Appendix C).
- Interviews with Town staff and meetings with Town boards, commissions, and committees.
- Socioeconomic data trends.
- Environmental challenges identified in Section 4.
- Needs identified in past planning efforts and current initiatives that support the enhancement and protection of the Town's open space and recreational resources.

In addition to describing what is lacking in Arlington, the needs analysis points to where the Town is already working to meet challenges and identify additional solutions. As noted in the last bullet above, the Town has undertaken many initiatives that are aimed at improving the quality of life in Arlington. Many of these

plans are highlighted below, and opportunities for making progress toward addressing Town needs are further articulated in Sections 8 and 9.

### A. Summary of Natural Resource Protection Needs

This section focuses on protecting and improving the environmental integrity of natural resources on public and private lands. The Town's local regulations and policies are designed to protect these resources from the impacts of development and human activities. Additional discussion on this subject is provided in Section C on management needs below. A common thread throughout is greater environmental stewardship among Arlington residents and businesses, as discussed in the last subsection.

#### 1. Water Resources

Arlington has been working for many years to improve the water quality of its rivers, streams, ponds, and wetlands. All are impacted by pollutants in runoff from streets and parking lots treated with salt and sand and from residential and business lawns treated with fertilizers and pesticides. These pollutants choke native

plants and allow invasive species to take over natural habitats.

### *Stormwater Management*

The Town's Stormwater Management Program, bylaw, and standards are tools to ensure that new development and redevelopment are minimizing the runoff from their sites into nearby waterways. Standards could go even further to expand and diversify stormwater management approaches and require the use of more nature-based solutions (NBS) that filter pollutants in runoff, and also provide floodwater storage, green space, and other benefits to mitigate climate change.

### **Mill Brook**

Mill Brook is identified by the Water Bodies Working Group of the Conservation Commission as being in poor condition with many long-standing water quality issues. The *Mill Brook Corridor Report* (2019) outlines ongoing priorities for the corridor, as well as near-, mid-, and long-term strategies that will improve water quality, increase public access and amenities, manage invasive species, stabilize the shoreline, mitigate flooding, and increase public awareness of this ecological and historical resource.

The corridor encompasses a mix of public and private ownership, which requires coordination and collaboration and could offer opportunities for property

### **Nature Based Solutions (NBS)**

**NBS are adaptation measures focused on the PROTECTION, RESTORATION, and/or MANAGEMENT of ecological systems to safeguard public health, provide clean air and water, increase natural hazard resilience, and sequester carbon. Incorporating NBS in local planning and design projects produces long-term solutions that benefit human and natural systems.**

**- Massachusetts Municipal Vulnerability Preparedness Program**

acquisition or conservation restrictions or easements. Arlington's Design Guidelines encourage private landowners to be partners with the Town in improving natural systems and increasing public access along the corridor.

At Wellington Park, the Mystic River Watershed Association (MyRWA) and the Town were able to use Community Preservation Act (CPA) funds and a Municipal Vulnerability Preparedness (MVP) Program Action Grant to begin implementing the recommendations of the Corridor Report. The project enhanced access to a half-acre of the park that had been overgrown with invasive species, built a new

boardwalk, porous pathways, and seating areas that allowed access to the brook, and installed additional native plantings and nature-based flood protection measures to help capture localized flooding in the area. The Town should continue to look for other opportunities that help meet the larger vision for the Corridor.

### **Spy Pond**

Spy Pond is another high-priority water body for the Water Bodies Working Group of the Conservation Commission. It is impacted by erosion of its shoreline and sedimentation from stormwater runoff, wave and ice action, and high recreational use on its banks. It is also impacted by invasive species. The Town is moving forward with the Spy Pond Edge and Erosion Control Project that includes shoreline stabilization, invasive species treatment and removal, and revegetation of banks of Town-owned property along the pond. The Spy Pond Committee annually prepares an educational flyer about the hazards of fertilizer use, which is distributed to residences around Spy Pond and other water bodies. The Town will continue monitoring to ensure Spy Pond is meeting recreational and environmental objectives.

### **Arlington Reservoir**

The *Arlington Reservoir Master Plan* (2018) is the guiding document to improve environmental health and recreational amenities at The Res. Recent upgrades and

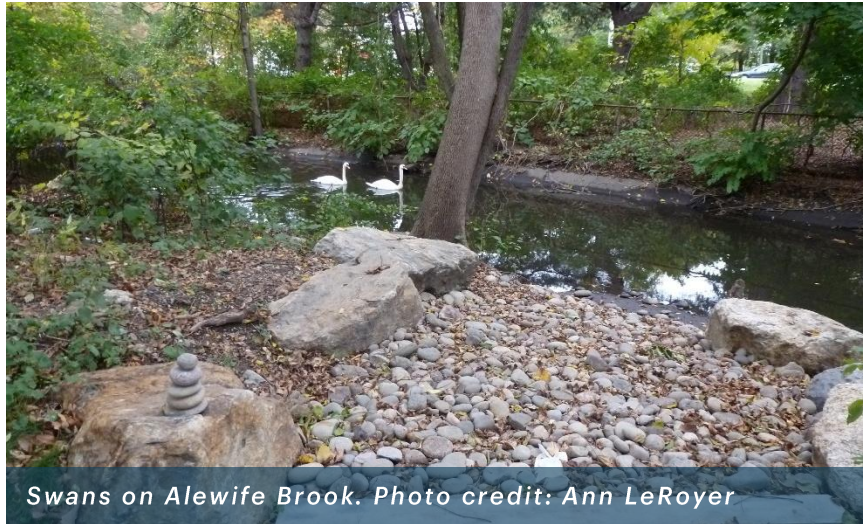
site improvements include a new filtration and UV system at the pump house, pump replacement, and building improvements. The Town continues implementation of the Master Plan to address water quality, erosion control/bank stabilization, invasive species management, and accessibility.

### **Mystic River, Mystic Lakes, and Alewife Brook**

These waterbodies are shared with neighboring communities and the Massachusetts Department of Conservation and Recreation (DCR). In its annual report card, the MyRWA gave the Mystic River a good water quality rating of B+ and Upper and Lower Mystic Lakes an A; however, Alewife Brook continues to maintain a poor grade of D (see Table 4-3). Recent projects in Arlington include the installation of NBS such as rain gardens and improved stormwater management infrastructure in East Arlington.

Somerville and Cambridge are serviced by combined stormwater and sewer systems, and during heavy storm events the system discharges polluted water through combined sewer overflow (CSO) outfalls into Alewife Brook, which affects several East Arlington neighborhoods. As directed by the Massachusetts Department of Environmental Protection (MassDEP), the cities are taking action to implement control measures at the CSOs to improve water quality. The Town continues to advocate for removal of the CSOs and to

monitor progress. The poor grade of D in Alewife Brook is based on bacteria contamination; therefore, removal of CSOs would greatly enhance the health of the brook.



## 2. Wooded Areas and Trees

The presence of trees in urban settings has been found to provide positive psychological and social impacts, including stress relief, as well as important environmental and economic benefits:

- Reduce surface water runoff and soil erosion
- Mitigate urban heat island effects
- Absorb air and water pollution and associated health benefits
- Reduce surface wind speeds
- Minimize noise

- Create wildlife habitat
- Enhance property values
- Climate change mitigation and resilience through carbon sequestration and carbon dioxide uptake

The Town has taken steps towards managing its wooded conservation areas and increasing the tree canopy species diversity to achieve these benefits. While respondents to the Community Survey felt the Town was doing a good job in protecting trees, many agreed more needs to be done to build on this effort.

### *Wooded Areas on Town Properties*

Small, wooded lots owned by the Town should be evaluated for forestry management needs. Of greatest concern are invasive species, which have proliferated throughout Arlington (e.g., Norway Maple, Japanese Knotweed, Garlic Mustard, Asiatic Bittersweet, Wineberry). Site-specific management plans for parks and conservation areas noted under Section C can include alternative forestry management components to ensure a healthy forest system with diversified species. Sites that could benefit from better resource management include Menotomy Rocks Park, Turkey Hill, Hill's Hill, and the Crusher Lot at the Ottoson Middle School.



### *Public Shade Trees*

The *Arlington Tree Management Plan* continues to guide the planting, replacement, and removal of public trees at the Town's schools, parks, cemeteries, and other public spaces and along local streets. The plan was developed based on the tree inventory and assessment conducted in 2017 and includes a summary of the findings. Overall goals of the plan are to:

- Increase the town's tree canopy by replenishing trees along Town streets.
- Continue planting initiatives on public parks, fields, schools, and other open spaces.
- Encourage residents to plant trees on private property.

The majority of new trees will be native species. The Tree Department of the Department of Public Works is responsible for implementation of the management plan, including overall maintenance and plantings of trees on Town properties as well as trees planted by the Massachusetts Department of Transportation (MassDOT).

The Town has a goal of planting 300 trees annually (on average, 150 to 200 are removed annually), with a goal of a net increase of 2,000 trees in 20 years. The long-term management of these new trees to ensure their survival remains a challenge. Staffing and other

resources are needed to install new plantings, address hazardous trees, and implement routine upkeep and maintenance. The existing inventory is a great resource, but an overall data management system should be developed to update the inventory as work is completed. Additionally, a schedule should be established to outline needs for tree maintenance on a yearly or multi-year cycle. The Arlington Tree Committee does outreach to residents and business owners to help with watering of newly planted street trees, along with other educational projects.



*Tree planting in 2021. Photo credit: Town of Arlington*

### *Private Trees*

The Arlington Tree Committee notes that more education is needed to help private property owners and developers understand the importance of protecting mature trees, planting new trees to expand the tree canopy, replacing older trees in poor condition, and using native species. Outreach to developers and the public is also noted below in Section C.

## 3. Wildlife Habitats and Corridors

Protecting and enhancing wildlife habitat strengthens biodiversity, which is important to support healthy ecosystems, but past development in Arlington has resulted in habitat loss, altered natural processes such as stream flow, and cut off travel corridors for wildlife.

Arlington has initiatives in place that, while focused on meeting other objectives, will also support reestablishing habitat, natural processes, and wildlife corridors, particularly around the Town's water resources as discussed earlier. These projects are

**Biodiversity refers to the variety of life and the natural processes that sustain life, such as water, nutrient, and energy cycling.**

**- MassWildlife**

improving aquatic habitat through invasive species management, use of NBS to filter pollutants, and shoreline stabilization. For example, efforts along the Mill Brook Corridor will not only improve water quality but also reestablish a natural floodplain along its banks, creating space for wildlife passage and protecting downstream property by slowing floodwaters during storms. Other existing corridors include the Minuteman Bikeway and Alewife Brook Reservation/Mystic River Reservation.

Acquiring land for wildlife habitat is limited in Arlington. However, there may be opportunities to protect some small parcels, through acquisition, conservation restrictions, or other means, to support the work being done to improve and protect the Town's natural resources. For example, the Town may want to evaluate and consider ways to connect existing conservation areas, open spaces, and recreational resources with "green corridors" to support wildlife passage and create connections for pedestrians, such as along Mill Brook and at Spy Pond and Cooke's Hollow. Other types of green infrastructure and habitats that are being explored are rain gardens, pollinator pathways, and meadow areas to attract insects and small wildlife.

## 4. Environmental Stewardship

The Town and its partners lead local efforts to protect Arlington's natural resources, such as the Conservation Commission's Land Stewards Program. However, it is important to empower residents and businesses to recognize their own roles as well. Personal choices can have a collective, positive impact. The Town has hosted EcoWeek and EcoFest to engage and educate residents about local environmental issues and projects. Other outreach events could include demonstrations and trainings on do-it-yourself sustainability projects, such as using native and pollinator plants, environment-friendly gardening and lawn care best practices to reduce fertilizer and pesticide use, and water conservation strategies.

These efforts should also be linked with the larger community goal of reducing the town's collective carbon footprint and being more resilient. The Town should promote projects to show their multiple benefits, not only improving the natural environment but also helping the community adapt to and mitigate the impacts of climate change. Collaboration with the Clean Energy Future Committee and its implementation of the *Net Zero Action Plan* can focus on energy efficiency and reduction, for example. This can be further supported by the implementation of *Connect Arlington*, the Town's 20-year transportation plan, which focuses on building

connections for walking, biking, and taking transit instead of driving to get around and through Arlington.



## B. Summary of Community Needs

This section focuses on the needs of residents to experience nature and have access to active recreational opportunities. Overall, attendees at the public workshops and respondents to the Community Survey felt Arlington offers a good variety of recreational amenities, including playgrounds and playing fields, as well as formal and informal programming. However, some residents' needs are not being met, and the Town needs to look for ways to improve access, use, and management of resources.



## 1. Safe Walking and Biking Paths and Connections

Walkable and bikeable neighborhoods have health, environmental, and financial benefits, making it easier to get around and fostering a greater sense of community. Walking and biking are more than just recreational activities and can be the primary way to do daily activities, like shopping, going to school, or commuting to work. Connecting destinations with walking and biking networks and getting people out of their cars minimizes greenhouse gas emissions and supports the Town's goal to be more resilient to climate impacts. Having these options for residents promotes healthy choices as well.

Walkable and bikeable neighborhoods need to be safe and accessible, and this is a top priority for Arlington residents. The Town has existing plans and initiatives in place to help address connection gaps, safety concerns, and lack of amenities. As mentioned earlier, Connect Arlington focuses on increasing multi-modal opportunities in town, and outlines detailed strategies to address safety, access, and efficiency of walking, biking, and transit use.

The Town has applied for and received funds from MassDOT's Safe Routes to School Project to improve access for students to walk and bike safely. For

example, Arlington's current project at Stratton Elementary School will provide a fully accessible walking route with safe roadway crossings along Hemlock Street between Brattle Street and Dickson Avenue, along Dickson Avenue between Hemlock Street and Mountain Avenue, and along Mountain Avenue to Wheeler Lane.

Finally, the Town's Complete Streets Policy guides decision makers on implementing street designs that consider all modes: walking, biking, car, and transit. Any new street or redesign of an existing street must consider access for all users. Building on these projects, the OSRP prioritizes safe access and connections to its conservation areas, public open spaces, and recreational amenities, particularly from local neighborhoods.

### *Minuteman Bikeway*

The Minuteman Bikeway is a valued resource, but access and connections to it raised significant concerns from some residents who felt the Bikeway is too crowded and dangerous for walkers. Some suggested widening the path to separate walkers and cyclists, using better signage about safety, and more lighting. The Bikeway also has limited access points, concentrated where the path crosses a street. More access points and designs that are accessible for people with disabilities are



needed. Specific areas in need of improvement (from east to west) included:

- Massachusetts Avenue at Kickstand Café
- Near Arlington High School
- Grove Street
- Near “The Bike Stop”
- Brattle Street
- Ryder Street
- Bow Street
- Near Park Avenue

New access points to the Bikeway were suggested at Margaret Street (instead of going through the Thorndike Field parking lot) and between Forest Street and Brattle Street.

More direct, safer connections between neighborhoods and the Bikeway are also needed. Residents see the need for more maintenance along the Bikeway, including addressing pavement condition (potholes and cracks) and invasive species.

The Town is undertaking two current efforts relative to the Bikeway. One feasibility project, started in early 2022, is exploring preliminary scenarios to create a connection from the Mystic River Path along the Mystic Valley Parkway to the Bikeway near Arlington Center. A second effort, the Minuteman Bikeway Planning Study, began in September 2021 to help address safety and

connectivity by identifying community goals and priorities and describing an implementation plan for improvements to the Bikeway. The plan will prioritize a series of infrastructure upgrades and include corresponding conceptual designs with estimated costs.

## 2. Environmental Equity

Open space and recreation planning with an equity lens seeks to ensure that all residents have access to a healthy environment, open space, and recreational amenities and opportunities, particularly in neighborhoods with predominately lower income populations and communities of color. These residents have historically been left out of the decision making and planning process and often lack amenities in their neighborhoods and overall access to resources. These neighborhoods have also been historically burdened by land use decisions that result in degraded water quality, air pollution, and other adverse environmental impacts. By focusing on these areas, Arlington can learn about residents’ experiences and make more equitable decisions going forward.

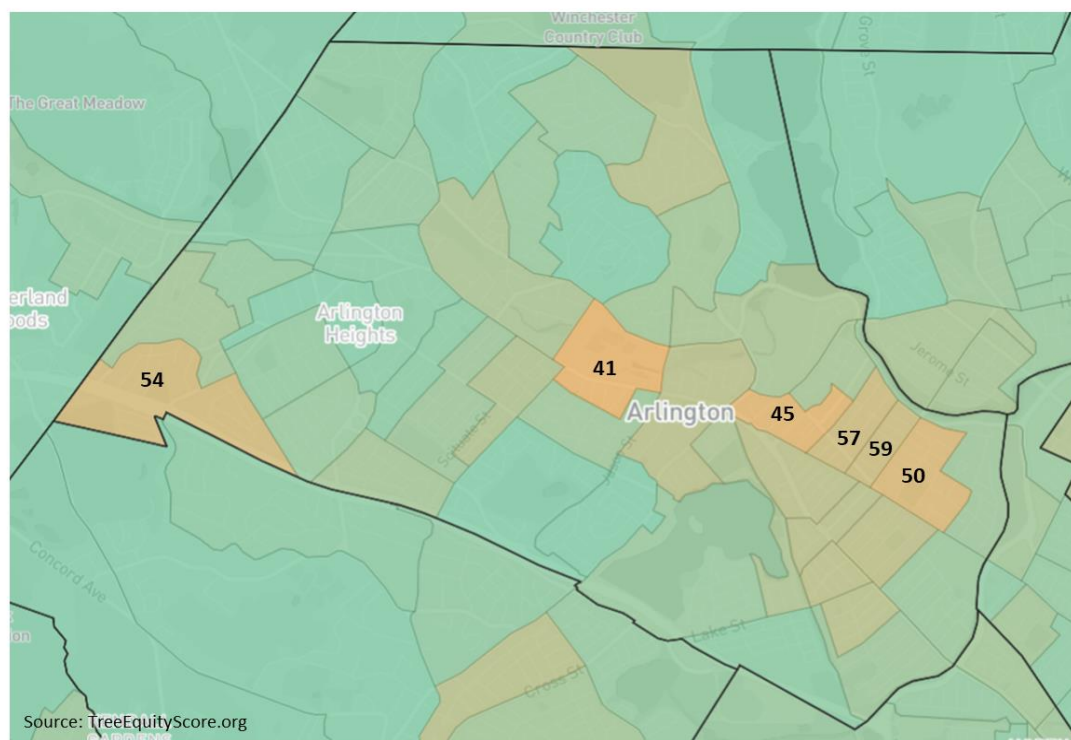
Map 4-4 indicates which areas of Arlington are considered Environmental Justice (EJ) communities, as defined by the Massachusetts EJ Policy and by U.S. Census Block Groups with lower income households eligible for Community Development Block Grant

(CDBG) funds. The overlap of these two criteria highlights priorities for evaluating access to resources and identifies neighborhoods that may be lacking opportunities. The map indicates that most of the people living in areas meeting both criteria have park space within their neighborhood or could walk to one in five to ten minutes (about one quarter mile). However, during the public engagement process, some residents noted that there are areas of Arlington that do not have easy access to a variety of parks or facilities. More targeted engagement is needed to understand specific neighborhood concerns and whether or not current resources are fulfilling neighborhood needs.

These neighborhoods also tend to have lower Tree Equity scores. American Forests defines Tree Equity as “having enough trees so all people experience the health, economic, and other benefits that trees provide.” The Tree Equity Score is a tool to help identify areas in Arlington that lack access to the benefits of trees. The score is derived from tree canopy cover, climate, and socioeconomic data. These metrics are combined into a single score between 0 and 100. A score of 100 means that

a neighborhood has achieved Tree Equity. Tree Equity Scores vary across Arlington, but lower scores are concentrated along Massachusetts Avenue and Broadway, corresponding to identified EJ neighborhoods and CDBG eligible Census Blocks.<sup>4</sup> Map 7-1 below shows those areas with the lowest scores that should be prioritized for new tree plantings.

Map 7-1. Arlington’s Tree Equity Score



<sup>4</sup> <https://www.treeequityscore.org/map/#12.68/42.41719/-71.16274>

### 3. New Resources, Amenities, and Opportunities

Through the public engagement process, new resources and amenities were requested to expand upon available opportunities in Town. Ideas ranged from new fields to accommodate team sports to more flexible spaces at the neighborhood level.

#### *Recreational Facilities and Programming*

Overall, residents feel the Town offers a good variety of playgrounds, playing fields, and recreational programming. With that said, some expressed a need for more types of playing fields, citing an increasing interest in soccer and lacrosse while the popularity of baseball and softball is declining. Field programming should reflect this trend. Volleyball fields and outdoor exercise and fitness parks were also recommended for new field uses. The Town should also explore opportunities for accommodating the growing popularity of pickleball and mountain biking.

Some residents commented that existing fields are allocated for organized team sports, leaving limited space for unorganized activities such as frisbee or “pickup” games. They are looking for more flexible spaces for unprogrammed and unstructured sports and events, including sports fields, open areas, indoor activity spaces and other facilities for all ages. Special

attention needs to be paid to outdoor activities directed to senior citizens, such as chess and checkers tables and regular exercise or yoga sessions, walking groups, and other such programs.

Some residents expressed concern about the scheduling of upkeep and maintenance of playgrounds, which is discussed in more detail under Section C. Summary of Management Needs and Potential Change of Use. They are looking for more modern, accessible equipment, including amenities that provide shade and shelter, water bottle filling stations, and portable restrooms. Residents also noted a lack of play spaces for older children. A similar observation is made in the assessment of the Town’s playgrounds by Playground Inspections of New England, LLC (November 2019). It notes that playgrounds vary in play opportunities for two-to-five-year-olds and five-to-12-year-olds, and that the Town should consider age appropriateness when playground and play area improvements are planned in the future.

#### *New Public Spaces, Amenities, and Opportunities*

Input from all stakeholders and residents on the types of new public spaces, programming, and amenities that could be offered in Arlington was diverse. As the Town explores these ideas, it will be important to ensure any use proposed on a site currently designated as protected open space or for recreation is allowed under

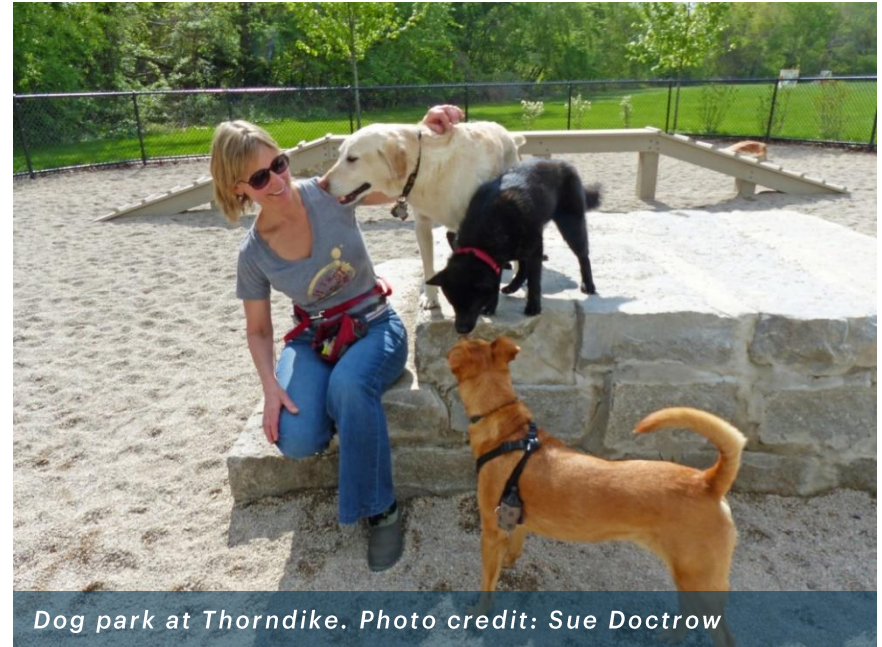
the Zoning Bylaw, Article 97, and other measures protecting and regulating site uses.

Non-traditional kinds of open spaces, such as more pocket parks, streetscapes, community gardens, and landscaping, can have multiple benefits, such as improving aesthetics, reducing pavement, and adding a neighborhood gathering place. Opportunities for these strategies can be made within wider road rights-of-way, on small town-owned vacant lots, or by finding private property owners to dedicate portions of their land for installations. The latter may not have to allow public access, but the added trees, landscaping, or plantings can still contribute to the quality of the neighborhood.

Many residents advocated for an indoor or outdoor swimming facility to supplement the seasonal beach at the Arlington Reservoir and the indoor pool at the private Boys and Girls Club. Some respondents noted the cost of such a facility could be prohibitive and should be considered against other needs of the Town.

Residents overall have mixed reactions to dog parks. Some residents like the Town's current dog park next to Thorndike Field in East Arlington, and some advocated for additional spaces to allow dogs off leash. Others call for more dog waste bag receptacles and trash bins and for more enforcement of leash requirements in Town

parks to encourage dog owners to control and clean up after their pets.



Residents want to make better connections between the Town's historic and cultural resources and its conservation, open space, and recreational areas. Incorporating events around the arts or historical happenings can increase activities in these areas and bring residents together in shared public art and performance experiences.



Finally, consistent signage and wayfinding among Town resources can improve accessibility and knowledge about these sites. A signage program could be part of a larger town-wide effort that links conservation areas, recreational facilities, historic sites, and other public spaces. Kiosks and boards could describe site-specific information and educate visitors about the area. To be more accessible to a broader audience, information should be available in multiple languages. Apps for smartphones are a simple way to provide translations. Signage should also be accessible for people with disabilities and designed with tactile, braille, and larger print options.

#### 4. Targeted Populations

To ensure that the Town is inclusive with its planning for open spaces and recreational resources, the Open Space and Recreation Plan (OSRP) focuses on the needs of specific populations in the community.

##### *People with Disabilities*

Identifying and removing barriers at Town-owned conservation areas, recreational facilities, and other public spaces are an integral part of this OSRP, which focuses on properties managed by the Park and Recreation Commission and the Conservation Commission. The Arlington Disability Commission was consulted to understand concerns and priorities for

*Accessible Design* describes a site, building, facility, or portion thereof that complies with the minimum accessibility standards as set forth under the Americans with Disabilities Act (ADA), Architectural Barriers Act, or local building code. Accessible Design has the distinct purpose of meeting the environmental and communication needs of the functional limitations of people with disabilities. Accessible design aims at minimum requirements to achieve usability.

*Universal Design* is the design of products and environments to be usable by all people, to the greatest extent possible, without the need for adaptation or specialized design (Center for Universal Design, 1997). The term Universal Design was first coined by architect and advocate Ron Mace, who was the Director of the Center for Universal Design at North Carolina State University. While Accessible Design is focused on the needs of people with disabilities, Universal Design considers the wide spectrum of human abilities. It aims to exceed minimum standards to meet the needs of the greatest number of people.

- National Center for Accessibility, Indiana University, Bloomington

<http://www.ncaonline.org/resources/articles/playground-universaldesign.shtml>

improvements from the disability community. They acknowledged the work done to date by the Town to remove barriers and offered an extensive “wish list” for consideration (see Appendix D). The list includes a range of short- and long-term projects at conservation areas, recreational facilities, and other public open spaces to diversify and increase opportunities for people of all ages with disabilities. Some examples are:

- Offering adaptive equipment for rent on the Minuteman Bikeway (trikes, hand cycles, tandem cycles, etc.) and for kayaking (outriggers, adaptive paddles/paddle holders, etc.).
- Providing storage for adaptive bikes along the Bikeway and at parks and other open spaces.
- Increasing accessible access for riders with disabilities on the Bikeway.
- Installing better signage and maps, including tactile, braille, and larger print versions.
- Increasing handicap parking spots and their visibility.
- Adding accessible seating, including benches and picnic tables.
- Creating more accessible paths.



*ADA improvements at Ed Burns Arena. Photo credit: Town of Arlington*

It is widely recognized that the Town needs to adapt more playgrounds with accessible equipment and structures for children with disabilities and special needs. Renovating playgrounds, and all parks, using the principles of universal design expands opportunities for all ages and abilities, regardless of experience, knowledge, or language.

The following evaluations are used by the Town to prioritize improvements to address accessibility barriers:

### **Conservation Commission Self Evaluation and**

**Transition Plan (2022):** Self-evaluation of the sites it manages, updating the evaluation done for the 2015 OSRP with noted improvements (see Appendix D and Open Space and Recreational Resource Inventory in Appendix B).

### **Field and Playground Feasibility Study (2021):**

Evaluation of 13 selected athletic fields and playgrounds that assessed existing conditions and developed recommendations to address issues associated with drainage, safety, turf, walkways, seating, and other amenities, including ways to enhance a site's ADA accessibility. Prepared by Stantec Planning and Landscape Architecture P.C.

### **ADA Self-Evaluation and Transition Plan (2019):**

Evaluation to assess the current level of Americans with Disabilities Act (ADA) compliance in programs, services, and activities and Town-owned facilities, which included four public safety buildings, 12 public school facilities, two libraries, two facilities managed by the Arlington Redevelopment Board, one cemetery building, one Recreation Department facility, and five Town-owned buildings. Prepared by the Institute for Human Centered Design. Not all these facilities are relevant to the OSRP.

### *Aging Population*

Community programs for seniors provide personal and health benefits, allowing them to stay physically and socially active. The Arlington Council on Aging (COA) offers diverse social services, programs, and activities for the Town's older residents, including health care support, transportation, and financial assistance. Fitness programs include a weekly walking group, yoga, and other exercise classes. During the COVID-19 pandemic, the COA was able to transition to virtual programming and develop "at-home" classes. Following major renovations, the former Senior Center, housed in the Central School behind Town Hall, reopened in 2022 as the Arlington Community Center with expanded programs and facilities.

The COA is developing an Age-Friendly Community Action Plan,<sup>5</sup> which focuses on creating a place where people of all ages are supported and are able to have a good quality of life. Outcomes of the plan will be policies and programs that result in walkable neighborhoods, transportation options, access to key services, opportunities to engage in community activities, and affordable housing options, all of which align with other initiatives the Town is undertaking. Accessible open spaces and recreational opportunities are also integral to an age-friendly community. The

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<sup>5</sup> <https://www.aarp.org/livable-communities/network-age-friendly-communities/>

Town anticipates its population over the age of 65 will continue to increase. It is important to maintain a diversity of programs and activities that meet the needs and interests of this broader audience.

### *Youth and Teens*

Creating recreational programs and activities for the Town's teens are an opportunity to promote youth development and show them they are valued in the community.<sup>6</sup> Activities allow young people to foster positive social relationships with adults and other youth, learn conflict resolution, and value civic engagement.

Many residents expressed the need for dedicated spaces and programming for tweens and teens that are not sports or team oriented. The skate park at McClennen Park is a great amenity but is a very specific use that may not appeal to all teens. Some would like to see a new community center that is fully multigenerational and could incorporate opportunities for teen activities along with a new swimming facility.

## 5. The Impacts of the Pandemic

All residents were impacted by the COVID-19 pandemic starting in 2020, but certain members were more at risk, including people 65 years and older, those with chronic health conditions like asthma, diabetes, obesity, and

heart disease, and those struggling with mental health issues. Lower income residents, communities of color, and persons with disabilities were also more likely to experience hardships as a result of the pandemic. The inequities of these impacts arise from many existing socioeconomic conditions, particularly barriers to accessing health care, quality housing, healthy foods, and quality open space and recreational opportunities, among others. During the early months of the pandemic, Executive Orders from the Governor closed essential businesses and places to the public, including state and local parks and recreational areas. Recognizing the importance of these resources for physical and mental wellbeing, residents still sought out opportunities to be active and be in natural settings.

Even while the impact of the pandemic waxes and wanes, there is opportunity to look at open space and recreational planning with a new lens and consider a possible "new normal." It also allows the Town to reflect on lessons learned and areas for improvement. Some questions to consider:

- How well did the Town keep programming and services available to residents while ensuring public health and safety during situations that warrant social distancing?

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<sup>6</sup> <https://www.nrpa.org/globalassets/research/witt-caldwell-full-research-paper.pdf>



- How can the Town continue to engage residents, particularly those that are most vulnerable and struggle in social isolation?
- How did Arlington make its parks and public spaces safe when social distancing was required?
- How should the town design future parks and spaces with these situations in mind?

The National Recreation and Park Association discusses these issues and challenges recreation professions to be creative and innovative while ensuring equitable access for all residents.<sup>7</sup> Arlington can work with its regional partners to share ideas, lessons learned, and resources. Advocating for parks and recreational areas as essential for overall community public health should be discussed.

## C. Summary of Management Needs and Potential Change of Use

This section focuses on the needs of Town staff and local boards and committees to manage and maintain the Town's open spaces and recreational resources. These needs include, but are not limited to, financial resources, technical assistance, staffing capacity, and regulations and policies to guide decision makers. They

could also address potential changes of use to meet open space and recreation goals.

### 1. Infill Development and Redevelopment

As a community with limited undeveloped land, infill development and redevelopment are the primary ways Arlington meets growing demands for more affordable housing and economic development. Even with this pressure, the Town must balance development with natural resource protection needs, resilience goals, and quality of life in Arlington. To the greatest extent practical, existing mature trees and native vegetation on a site should be maintained. Further, integrating new design features that enhance these natural areas and add open spaces into the site design can benefit future residents and those living in the neighborhood.

Examples of what this looks like include:

- Walking and biking connections between development projects and nearby conservation areas, recreational facilities, and public spaces.
- NBS to manage stormwater and contribute to landscaping design.
- Meaningful public spaces within the development that have benches, tables, or other seating, landscaping, and shade trees.

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<sup>7</sup> <https://www.nrpa.org/our-work/Three-Pillars/health-wellness/coronavirus-disease-2019/>

The Town has existing bylaws and policies in place to protect a site's significant vegetation, such as for development that goes through the Environmental Design Review (EDR) process (see Section 3.D. Development Patterns and Trends). Projects that fall under Title V Article 16 Tree Protection and Preservation of the Town's Bylaws must protect trees with a certain diameter and height. If they are to be removed, a Tree Plan must be developed and approved by the Town's Tree Warden and payment made to the Tree Fund for the planting of public shade trees to compensate for the loss of trees. Meeting stormwater management requirements also requires a development to maintain and enhance natural features of a site. The Town's Design Standards for commercial corridors also encourage the inclusion of rain gardens, mature trees, and other forms of green infrastructure in the public realm of a development as well as linking sites with nearby amenities. These standards are a resource for the Redevelopment Board as part of their review of Special Permits.

Looking ahead, the Town should review recent infill and redevelopment projects and measure the natural resource benefits achieved through their design. A review might identify progress on improvements to resources and sites, as well as any missed opportunities to add amenities. For example, there may be opportunities to amend bylaws or policies to look at

developments that should include NBS in their design, or to "require" over "encourage" the use of NBS for stormwater management in all development. For higher-density development that may not be able to accommodate open or public space on site, the Town might want to consider other options. For example, it could prioritize investments in walking and biking connections to nearby parks or recreation amenities.

Whether the Town requires these amenities or encourages them through incentives, it must clearly articulate to the public, property owners, and decision makers why natural features are important in infill and redevelopment project design. The environmental, economic, and social benefits meet so many community needs. They are also key in adapting to and mitigating the impacts of natural hazards and climate change, specifically reaching multiple goals stated in Arlington's Net Zero Action Plan and addressing priorities of the Community Resilience Building Workshop, among other plans and projects.

## 2. Improvements, Maintenance, and Upkeep of Resources

Maintaining high quality park and recreation amenities and services to all residents is a challenge for all communities. Conservation areas, recreational facilities, and other public spaces in Arlington are diverse and at

times require different resources and equipment for their upkeep. The Department of Public Works, School Department, and Recreation Department all work together, but are guided by several committees, including the Conservation Commission, Open Space Committee, School Committee, Park and Recreation Commission, Arlington Redevelopment Board, and Select Board. The Town has begun a process to develop a town-wide Public Land Management Plan, which would encompass all Town-owned land assets, including recreation facilities, water bodies, conservation areas, and historic sites. The plan would create a larger vision around the management of these properties to better utilize and manage these resources. While this larger plan is in development, there remain specific needs at recreational facilities and conservation areas.

### *Recreation Areas*

Key needs for recreation facilities focus on regular maintenance, staffing, coordination, and funding. Several long-standing issues are associated with maintenance and upkeep of facilities. One relates to addressing immediate needs and the availability of staff. Department of Public Works staff perform maintenance at all Town properties, including parks, schools, athletic fields, and playgrounds. A complaint about an issue at a park or playground typically is made to the Recreation Department, which in turn reaches out to the

Department of Public Works. The two departments work together to resolve the complaint, but there are times when it is not always clear who will respond to a complaint. There is always room for improvement in the communication between the departments and the public.



*Buck Field Playground. Photo credit: Ann LeRoyer*

During the warmer months, the Town's parks and conservation areas are used more intensely and demand increased attention to general site clean-up, turf and landscaping maintenance, and other needs. During the COVID-19 pandemic in 2020 and 2021, park use increased dramatically and put further strain on these

resources, requiring more time and effort from existing Public Works staff. At times, it would take longer to fix equipment or address complaints. Residents continue to appreciate the public health benefits of parks and demand will likely continue to be high. Meeting these demands could strain staff and resources.

A larger issue around upkeep focuses on long-term maintenance. Several responses to the Community Survey noted that playgrounds need to be updated before they are in major disrepair and cannot be used because of safety concerns. Of note were those at Menotomy Rocks Park, Brackett School, Robbins Farm Park, Peirce School, Poet's Corner, and Cutter School. Other people commented that many fields need drainage improvements and new turf, such as Hill's Hill, Crosby School, Peirce School, and Ottoson Middle School soccer fields.

Through a collaboration between the Department of Public Works and the Recreation Department, the Town needs a regular maintenance schedule that prioritizes the replacement and updating of recreational equipment and/or amenities. The Town has made a lot of investments in its parks, playgrounds, and ballfields in recent years. Long-term care and upkeep will ensure these facilities remain attractive and safe. Further investments are needed at other sites and the level of investment may vary depending on the age and

condition of equipment. The *Town of Arlington Fields and Playground Feasibility Study* (2021) and the playground audit by Playground Inspections of New England, LLC (2019) provide existing conditions, recommendations for improvement, and estimated costs. These are a great starting point to identify sites most in need of upgrades and outline a long-term strategy. The Public Land Management Plan can also help prioritize and coordinate resources with the needs of other assets.

Implementation of a long-term maintenance schedule needs a sustainable funding source. There are two primary municipal sources of funding available to the Recreation Department, and both are competitive with other departments and projects. Through the Capital Improvement Program (CIP), town funds are allocated over a five-year period for the maintenance and improvement of municipal assets, including projects at recreational areas. CPA funds can also be used to develop open space and recreational facilities, preserve open space and historic sites, and create affordable housing. Recreation Department projects have been funded by both sources. State funds are also available to develop and maintain recreational amenities and address accessibility issues, but these funding options are highly competitive with other municipalities in the Commonwealth. Presenting a long-term maintenance schedule that outlines clear objectives gives the



Department some leverage in securing funding in these competitive situations, particularly with the multiyear CIP.

Finally, programming of the Recreation Department throughout the year is administered with minimal staff. The department oversees year-round recreational programs for all ages at most of the Town's parks and facilities. Ten to 12 organizations rent the facilities annually to offer many of these programs. The department also manages the Ed Burns Arena and Ice-skating Rink and the seasonal swimming beach at the Reservoir. It also oversees the 54 plots at the Magnolia Park Community Gardens, which currently has a three to four year waiting list. Before the pandemic, the department offered a summer canoe and kayak rental program at Spy Pond. Additional staff, both seasonal and year-round, can help support the work and programming of the department.

### *Town Conservation and Open Space Areas*

The needs to improve and maintain the ecological integrity of natural systems on the Town-managed conservation and open space areas detailed in Section A. Summary of Natural Resources Protection Needs. From a management perspective, key needs focus on maintenance, staffing, coordination, and funding. The Department of Public Works also performs upkeep and maintenance on these sites with guidance from the

Conservation Commission and Open Space Committee. The Conservation Land Stewards is a group of volunteers who take an active role in the upkeep of the Town's conservation lands and other public spaces through clean-up efforts, invasive species control, trail maintenance, and erosion control and planting projects. The Town also relies heavily on "friends" groups that have been organized at many Town parks for these efforts. It is important to have a diverse pool of new volunteers and Land Stewards to ensure that existing volunteers are not overburdened.

Management of the Town's conservation and natural resource areas can also be guided in a comprehensive and strategic way through the pending Public Land Management Plan, particularly where there are similar needs, such as invasive species management, trail maintenance, signage, or accessibility. However, some sites have unique challenges such as erosion, sedimentation, water quality, impacts of pesticides and herbicides on wildlife, and the impact of artificial surfaces on heat islands and the quality of wildlife habitat. Development of site-specific management plans can help tackle these challenges more directly. The Arlington Reservoir Master Plan and the Mill Brook Corridor Study demonstrate the importance of these types of site-specific plans that move recommendations through implementation. The CPA Committee has also helped to fund conservation areas in need of site-

specific plans, and in 2022 is supporting proposed studies of Cooke's Hollow and Mount Gilboa Conservation Area.

### 3. Sustainability and Resilience

As stated throughout this needs analysis, Arlington has made it a priority to meet the challenges of natural hazards and climate change. The plans that are moving the Town toward a more sustainable and resilient future include:

- Connect Arlington (May 2021)
- Net Zero Action Plan (February 2021)
- Hazard Mitigation Plan (May 2020)
- Community Resiliency Building Workshop supported by the Municipal Vulnerability Preparedness (MVP) Program (2017)

While the OSRP is a separate document with a particular action agenda, it works in concert with these plans and makes references to them to create a continued focus on these common objectives. As noted earlier, natural resources and processes, while impacted by climate change, can also build resilience. The Town continues to ensure the health and productivity of its resources to maintain their values and functions through local regulations, conservation efforts, and mitigation and enhancement projects. Broad strategies include:



- Review local bylaws and regulations to ensure they meet anticipated impacts of more intense and frequent storm events and more extreme precipitation and temperature cycles, among other projections.
- Review stormwater management infrastructure to identify opportunities to incorporate more natural features to slow and collect rain runoff during storms.
- Find natural areas, such as wetland, streambanks, and wooded areas, that would benefit from preservation and enhancement to maintain and support their ecological functions that build resiliency.

- Monitor changing environmental conditions, including waterways, floodplains, and wetlands, among other vulnerable areas.

Approaches that focus on natural resources go hand in hand with other adaptive strategies to improve roadways and utility infrastructure and policies that promote development with less impervious surface area.

Preparing for the impacts of natural hazards and climate change involves all municipal departments in a coordinated effort, beyond those that participate directly in open space and recreational planning. The Town has invested in its municipal leadership and built staff capacity, including a Sustainability Manager and a Schools Sustainability Coordinator. Completing actions outlined in the OSRP Action Plan (Section 9) will require coordination among all these individuals and the various town committees they support.

## D. Regional and Statewide Needs

The Town of Arlington's OSRP builds on and supports open space and recreational planning efforts to meet broader goals and needs in the Greater Boston region and beyond. Many of these plans and related projects are highlighted in earlier sections of this plan.

### 1. DCR Parkways Master Plan

The DCR *Parkways Master Plan* (2020) focuses on parkways within the Boston metropolitan region to build an interconnected network of walkways and bikeways. The Mystic Valley Parkway is included in the study, and there are 1.6 miles of the Parkway within Arlington. The plan notes areas where there are no bicycle or pedestrian accommodations along the Parkway, such as where bike lanes or pedestrian crossings are lacking, and recommends short- and long-term alternatives to address these gaps. Arlington will continue to coordinate with DCR and neighboring communities through its ongoing bicycle network plans and the implementation of Arlington Connect. In addition, the Department of Planning and Community Development (DPCD) kicked off the Mystic River Path to Minuteman Bikeway Feasibility Study in January 2022. This project will review the existing trails and feasibility of creating new trails along the Mystic River from Decatur Street in East Arlington, along the Mystic Valley Parkway to Summer Street and then connect to the Minuteman Bikeway through Buzzell Field or via Mill Street.

### 2. MAPC's *MetroCommon 2050*

Arlington's OSRP builds on and contributes to the success of MAPC's *MetroCommon 2050*, the Greater Boston Region's 30-year plan to better the lives of the people who live and work in Metropolitan Boston

between now and 2050. It includes 10 specific goals for the year 2050, as well as objectives that will be used to measure progress toward achieving those goals.

Arlington's OSRP goals and objectives, as well as the action plan are consistent with the following goals and objectives from *MetroCommon 2050*:

*Goal A. Getting Around the Region: Traveling around Metro Boston is safe, affordable, convenient, and enjoyable.*

4. Bicycle, pedestrian, and other personal mobility infrastructure is safe, extensive, high quality, and linked to other modes, so that people frequently use active transportation as a preferred mode of travel.

Arlington's OSRP strongly supports and continues to build on local efforts to maintain and enhance its bicycle and pedestrian network. The Town is dedicated to identifying gaps to establish safe connections between residential areas, parks, conservation areas, schools, and other destinations. The Minuteman Bikeway is an important regional resource, and the Town is working to make it more accessible and safer for all users.

*Goal C. A Climate Resilient Region: Metro Boston is prepared for—and resilient to—the impacts of climate change.*

6. Green infrastructure beautifies neighborhoods. It is included in all developments, providing multiple co-benefits, such as stormwater filtration, shade, cleaner air, carbon storage, and cooling.

Arlington's OSRP strongly supports protecting the natural environment to retain beneficial functions and values and increasing access to recreational resources to adapt to and mitigate the impacts of climate change and natural hazards. The Town is building resilience with local projects and through collaboration in the region that will help Arlington prepare for and respond to future climate challenges.

*Goal F. A Healthy Environment: Greater Boston's air, water, land, and other natural resources are clean and protected—for us and for the rest of the ecosystem.*

1. Water is clean and sustainably managed. Waterways exceed Clean Water Act standards and meet the appropriate needs of residents, industry, forests, farms, and wildlife.
2. A robust network of protected open space, waterways, farms, parks, and greenways provide wildlife habitat, ecological benefits, recreational opportunities, and scenic beauty.
3. Farms, fisheries, community gardens, and natural landscapes are prevalent, and able to adapt and



thrive in the face of the changing climate. They offer residents access to fresh, affordable, healthy, and local food.

4. Populations who experienced historic environmental injustices enjoy air, energy, and water as clean as any other residents enjoy.
6. Few contaminated sites exist. Former contaminated sites have been redeveloped to create jobs or homes, or restored to support green infrastructure and habitat, and to mitigate climate impacts.

The major purpose of Arlington’s OSRP is to maintain and enhance the environmental, economic, and social benefits of the Town’s natural environment and recreational resources for residents, businesses, and visitors.

*Goal I. Healthy and Safe Neighborhoods: We are safe, healthy, and connected to one another.*

7. State and local governments have the resources to maintain their parks, public squares, sidewalks, and open spaces.

The Town is committed to building local capacity to support the planning, protection, management, and sustainable use of environmental and recreational resources. Arlington’s OSRP strongly supports

advocating for sustainable municipal funding sources and participating in regional planning initiatives.

*Goal H. Thriving Arts, Culture, and Heritage: Greater Boston is full of unique places and experiences that bring joy and foster diversity and social cohesion.*

4. Historic buildings, properties, and landscapes are adapted to meet contemporary challenges, including climate, housing, accessibility, and recreational needs.
6. Urban design, public art, and new development contribute to a human-centered, safe, and delightful public realm.

Arlington’s OSRP highlights how many of the Town’s historic and cultural resources connect to its public spaces and recreational areas and looks for opportunities to incorporate public art and cultural events into these spaces.

### 3. Massachusetts Statewide Comprehensive Outdoor Recreation Plan (SCORP)

The 2017 Massachusetts Statewide Comprehensive Outdoor Recreation Plan (SCORP) was developed by the Massachusetts Executive Office of Energy and Environmental Affairs (EEA). The SCORP is a planning document that assesses the availability of recreational

resources and the needs of residents throughout the Commonwealth as a way to identify gaps. It is also one method for states to meet multiple goals of the National Park Service and remain eligible for funding from the National Land and Water Conservation Fund (LWCF). In Massachusetts, EEA administers LWCF grants to Commonwealth communities with approved OSRPs. Grants can be used for activities that address recreation and open space needs, including land acquisition for conservation or recreation purposes or park renovation.

The development of the latest SCORP involved an extensive public outreach process, including regional public meetings and surveys that targeted specific groups: recreation users, municipal employees, land trusts, and middle and high school students. Through the public participation process, these four outdoor recreation goals were identified for the 2017 SCORP:

1. Access for Underserved Populations
2. Support the Statewide Trails Initiative
3. Increase the Availability of Water-based Recreation
4. Support the Creation and Renovation of Neighborhood Parks

Arlington's OSRP incorporates similar themes in its goals as the SCORP. The Town values the diversity of its population and recognizes that individuals should have

access to open space and recreation resources that are safe, accessible, and equitably distributed across the community. Arlington's OSRP envisions a network of corridors—for people and wildlife—to connect resources and other public space and encourage non-vehicular transit. The OSRP also recognizes the importance of regional planning initiatives to strengthen walking and biking connections with neighboring communities. Arlington is fortunate to have water resources with substantial scenic, recreational, and ecological value in the community. The OSRP reiterates Arlington's commitment to working locally and with regional partners to improve the quality of shared water resources to benefit water-based recreation and aquatic life. Finally, the Town wants to create new recreational opportunities, including neighborhood parks, based on community preference and manage its existing resources responsively. The Town will continue to support events, programs, and other opportunities for users at neighborhood parks to recreate.

The following is an overview of the SCORP's public outreach results organized by different users and providers of recreation spaces. This section also identifies commonalities between the SCORP and Arlington's OSRP public engagement results and comments on how the Town's OSRP addresses specific regional needs and opportunities.

### *Recreation Users and Youth*

Through the SCORP surveys, most recreation users said outdoor activity was very important to them for physical fitness, mental well-being, and being close to nature. When asked why they visited a specific outdoor recreation facility, most responded that it was closest to their home. About three-quarters of survey respondents had a park or conservation area within walking or biking distance to their homes, but more than half drove to more distant locations. Lack of time was the number one reason why respondents did not visit outdoor recreation sites more frequently.

Most respondents to the survey felt that programming at a facility was somewhat or very important, particularly for seniors, young children (four to 12 years old), and teens. The most popular recreational activities respondents engaged in over the past 12 months were water-based recreation (boating, swimming, etc.) and trail-based recreation (hiking, biking, cross-country skiing, etc.). Desired amenities or activities included more trails, inclusive playgrounds for young children of all abilities, and more water-based recreation.

The most popular activities for middle and high school-aged youth were team activities like soccer, lacrosse, and football. Teens also favored swimming, hiking, running/jogging, walking, and road biking. Youth and teens frequented outdoor recreation facilities closest to

where they lived for fun and enjoyment, spending time with friends and family, and to be outside. Lack of time, weather, and use of the Internet were noted as primary reasons why some younger respondents did not visit facilities or participate in recreational programming. Desired amenities included more recreational sites close to home, more equipment at sites, and spaces that are “just for kids my age.”

Similar needs were expressed in Arlington. Access to a park or public open space in their neighborhood was voiced as a benefit by some residents and is a specific focus when looking at Environmental Justice communities. Many residents also expressed the need for more inclusive playgrounds for children of all ages. More diverse youth programming was also desired.

### *Municipal Employees*

Municipal land and conservation staff were asked about the types and quality of resources available to their residents. Out of 351 Massachusetts communities, 58 municipalities (17%) responded to a survey. Most responses (about one third) came from local conservation commissions followed by parks and recreation departments. More than half (69%) of respondents had part- or full-time recreation staff and 82% had part- or full-time conservation staff. The SCORP noted that this demonstrates that communities are able to provide many types of outdoor recreation facilities

for their residents. Important factors to consider when determining a community's staffing and financial capacity to provide quality resources and programming are the number of sites a community has, the types of amenities offered at each site, regular maintenance required, and the size of the sites, among other attributes.

About half of the respondents offered more than nine programs annually. Those providing fewer activities focused on those that connected children to the outdoors. Only 16% responded that they offered more than four activities per year for people with disabilities.

Since the passage of the Community Preservation Act, Arlington has been able to fund projects that improve open space and recreational opportunities. Staffing capacity continues to be a challenge to providing a high level of recreational amenities and programming, and more inter-departmental coordination is needed for ongoing upkeep and maintenance. Long-range planning for scheduling updates and major renovations is also needed.

### *Land Trusts*

About one-third of land trusts in the Commonwealth responded to the SCORP survey. Most cited connecting the public with nature as the most important issue for their organization, followed by connecting with local

neighborhoods and schools. Popular activities on land trust properties were walking/jogging/hiking, dog walking, and nature study. The top three issues facing land trusts are trail work, conservation restriction stewardship, and acquiring new land. Invasive species are the greatest physical issue faced by land trusts. As to social issues, littering and dumping are encountered most frequently.

The Arlington Land Trust owns and manages Elizabeth Island in Spy Pond and co-holds conservation restrictions on several private properties, including the parks and woods at Arlington 360 (the former Symmes Hospital site). It brings awareness of the benefits of conservation and environmental stewardship to residents through educational events and outreach. The all-volunteer group also advocates for the protection of the limited remaining undeveloped land in Arlington.

Managing Town-owned conservation areas and other open spaces in Arlington falls under the purview of the Conservation Commission, the Department of Public Works, and volunteers. Primary issues in these areas are implementation of wetlands bylaws and other regulations, invasive species management and minimizing the use of harmful chemicals, environmental stewardship including litter cleanup, and managing disparate uses.